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NETWORK ENABLED GAMING KIOSK

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NETWORK ENABLED GAMING KIOSK

PRIORITY

This application claims priority from Provisional Application Serial No. 60/143,958 of the same title, filed July 15, 1999 and incorporated herein by reference.

FIELD OF INVENTION

The present invention relates generally to the gaming entertainment industry. More specifically, the present invention relates to a network-enabled gaming entertain-ment system, which features one or more game stations that provides interactive Internet and/or Intranet gaming.

BACKGROUND OF THE INVENTION

The boom of the Internet, coupled with record sales of computer games, has created one of the fastest growing markets in the computer industry; namely, interactive Internet gaming. Empirical research indicates that virtually every person who has operated a computer has played a game on that computer, from Solataire to the newest and most complicated "shooter" games.

The past several years have produced massive changes in the improvement of computer technology, such as more RAM, bigger hard drives, and high-speed modems. Now, not only can the two-dimensional games yesteryear be produced in an interactive 3-D platform, but with current high-speed modems, users can connect to each other via the Internet.

Recognizing the booming Internet and the potential market for Internet interactive games, game manufacturers began producing software specifically for use on the Internet. For example, Doom manufacturers established the first network service where experienced gamers could congregate, play, chat, trade maps, and the like. In essence, it was the first gamer Internet social community. In early 1996, multi-player games were still not possible and, for the computer novice, computer settings were still too confusing and frustrating to enjoy this new entertainment concept.

Another important factor that contributed to the explosion of interactive Internet gaming was the user-friendliness of games on the market. In the beginning, only one-on-one games could be played. In mid-1996, Total Entertainment Network (TEN) launched its beta program for the first user-friendly, multi-player, interactive Internet game network. TEN's

network launched a variety of popular interactive action games, including the ever-popular DukeNukem 3-D, which provided a full three-dimensional experience, was interactive with other gamers, and was almost virtual reality.

In late October 1997, Microsoft announced that its free Internet Game Zone <www.zone.com> had attracted more than half a million members, making it the largest gaming site on the Internet. Since Microsoft launched a re-designed Internet Game Zone in March, 1998, Game Zone has added approximately 100,000 new members per month. There are currently in excess of 1.5 million members.

Game Zone, a free site for gamers (connect-time charges may apply), generates revenue from advertising and now, with the addition of "Fighter Ace", has opened a second revenue stream from daily and monthly subscriptions for this premium game.

As is readily apparent, the interactive Internet gaming industry is both very new and rapidly expanding. The online gaming market had sales of $162,000 in 1996, and $277,000 in 1998. Projected online gaming revenues for 2002 are expected to be from $1.9 to $5 billion dollars. As such, the number of online gamers is expected to grow from approximately 6.9 million players in 1998 to 18.3 million players in 2001.

Currently, approximately 3 million members, 30 percent of AOL's nine million members, play Internet games an average of 15 hours per week. Empirical research paints an interesting Internet gamer customer profile. The gamer is an individual whose life is games and loves beer. Most gamers have an annual income (or are supported by someone with an income) that averages $70,000.

Gamers like new things and are very loyal to the product(s) they use. They typically tell everyone about the product(s) they use, both verbally and on the Internet. The average gamer is a male between the ages of 18 and 34. The average male gamer plays an average of 21 hours per week, and is currently 85 percent of the paying Internet game subscribers.

An estimated 80 percent of the computer-owning female population play games. Approximately 50 percent play games on the Internet or via online services. An estimated 15 percent play Internet "shooter" games. Recently, more and more females are signing on to the Internet for non-shooter games, such as strategy games like Monopoly™ and Clue™.

So serious is the gamer that a professional gamer's league has been organized. Hosted by TEN, the AMD Professional Gamer's League (PGL) was announced on October 22, 1997. The PGL's first year cash and prizes amounted to $250,000, and attracted more than $2 million in sponsorship money from such companies as AMD, 3M, Logitech International, S.A.,

Rendition Inc., Creative Labs Inc., GTE Corporation, 3Com Corporation, and Levi's Inc. The current PGL 'Spring '99 Season' has received more than 1,600 entries.

Because today's trend in gaming devices is towards increasing use of Internet-based gaming platforms, there is a growing need for interactive Internet gaming in a social setting. The following prior patents represent the state of the art, and are all hereby incorporated by reference.

U. S. Patent No. 6,080,063 to Khosla discloses a game play system that allows remote players to participate in a concurrent simulation of a live event as the live event is occurring. The system gathers input from sensors located at the live event, pre-processes this input, and transfers it to a computer system, which uses this input to create a concurrent simulation of the live event.

U. S. Patent No. 6,056,640 to Schaaij discloses a computer game system for a number of human players to play a computer game in which at least one game object is manipulated in a game area by a number of virtual game characters.

U. S. Reissued Patent No. Re. 36,574 to Hochstein et al. discloses a video game synchronizing assembly adaptable to communicate a local video game with a remote video game.

U. S. Patent No. 5,292,125 to Hochstein et al. discloses a video game communication assembly for communicating command signals between a local video game and at least one remote video game.

The problem with one or more of the above-mentioned conventional gaming systems is the inability to connect at a kiosk to the Internet to both enjoy interactive Internet gaming and cruise the Internet.

An additional problem in one or more of the prior art references is that the disclosed systems are not conducive to retail interactive Internet gaming in a social setting.

Yet another problem in one or more of the prior art references is that a gamer enthusiast or novice is generally limited to personal-based computer gaming applications, usually with the look and feel of computer monitor screens.

A further problem in one or more of the prior art references, particularly simulation systems involving a group of simulated players, is that access to a particular simulation is restricted to a limited number of simulated players in order to avoid problems of overcrowding.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a network enabled gaming entertainment system that provides interactive Internet and/or Intranet gaming in a social setting where user's may play, eat, drink and socialize outside a home environment, for example.

It is another object of the present invention to provide a network enabled gaming entertainment system that does not limit a user's connection to the Internet and/or Intranet by physical presence at a specified location.

It is another object of the present invention to provide a network enabled gaming entertainment system that uses state-of-the-art sound and video systems to further enhance game play.

It is another object of the present invention to provide a network enabled gaming entertainment system that allows coordination of the computer games in the entertainment system from more than one geographical location.

It is another object of the present invention to provide a network enabled gaming entertainment system that has the capability to accommodate an immense array of games.

It is another object of the present invention to provide a network enabled gaming entertainment system that is subscriber-enabled.

It is another object of the present invention to provide a network enabled gaming entertainment system that is easy to use and install.

It is another object of the present invention to provide a network enabled gaming entertainment system that is compatible with existing computer games, and allows easy access to the games.

It is another object of the present invention to provide a network enabled gaming entertainment system that takes into account performance, reliability and price.

It is another object of the present invention to provide a network enabled gaming entertainment system that is capable of allowing direct link-up to Internet gaming service providers, as well as serving as a hookup link for tournaments among multiple locations.

It is another object of the present invention to provide a network enabled gaming entertainment system that has the ability to connect to multiple users through an Intranet and/or Internet.

It is another object of the present invention to provide a network enabled gaming entertainment system with security measures that disable the ability to access the operating system.

It is another object of the present invention to provide a network enabled gaming entertainment system that is easy to change and/or update.

It is another object of the present invention to provide a network enabled gaming entertainment system that is manageable and practical in its implementation.

It is another object of the present invention to provide a network enabled gaming entertainment system that does not require significant hardware and/or software in its implementation.

It is another object of the present invention to provide a network enabled gaming entertainment system that uses and/or adapts to existing hardware and/or software.

The above objects are accomplished by a unique network enabled gaming entertainment system devoted to interactive Internet and Intranet gaming. It takes into account performance, reliability and price, and may be divided into three component sub-systems.

The first sub-system is a server where gaming software programs and data reside. Alternatively and optionally, the gaming software programs and data may reside and/or are stored elsewhere. Data management remote access and other data management software protocols are linked to the server. The server is microprocessor-based, and support state-of-the-art video and sound systems. Preferably, it also provides account information, gaming profiles and/or local/global gaming.

A suitable server includes, but is not limited to, devices comprising a microprocessor, any processor driven system, a computer, a tangible medium with instructions therein, other electronic device or the like. It may be specially constructed for the required purpose, or it may comprise a general purpose computer as selectively activated or reconfigured by a computer program stored in a computer.

The second component is a network-enabled gaming station or kiosk enclosure that is user-friendly. Each game station is preferably a network client of the server, such as a LINUX server. Games may or may not be stored on the server. In one embodiment, the operating system software is Microsoft Windows 98™. The standard TCP/IP stack is used for network connectivity.

In one embodiment of the present invention, a physical representation of a game station or kiosk enclosure is a stand-along structure. Each kiosk is configured for Intranet and/or Internet access with one or more kiosks at the same and/or remote locations.

Game stations made in accordance with another embodiment of the present invention are also configured for interactive Intranet and/or Internet gaming access to other electronic audio/video data files through home, office and other electronic equipment, such as television, stereos, cable, modem, personal computers, mobile telephone and wireless devices.

Other components of the kiosk may include a user interface, which may comprise a keyboard or pointing devices. Alternatively and optionally, user interfaces may include a mouse and/or joystick and/or a magnetic card reader. Magnetic game cards may be removed from the database, and promotional intervals may optionally be automatically added as desired.

Interchangeability of user interfaces is another important feature of the present invention. It allows flexibility for other types of game input devices. This flexibility accommodates a wide variety of user game choices.

Each kiosk generally also includes a monitor, which may be inlayed into 'Net GameLink™ tables, and lighting. Also, each kiosk is configured for capability with a bar code reading device, for use with a magnetic card reader for example, for authentication and authorization purposes.

The third component is the network system. The network system, which provides the highest network throughput possible, generally consists of cabling, hubs, routers, network interface cards, and switches. Alternatively and optionally, the network system may also include software. Preferably, it is configured to provide local, Intranet and Internet connectivity. It is configured for use with both IPX/SPX protocol and TCP/IP.

The software suite supporting the gaming entertainment system of the present invention communicates between the various operating systems, game technologies and the user. Also, preferably, the software suite facilitates Intranet and Internet connectivity. The suite preferably includes the database management software, the cashier workstation application software, the game station application software, operating systems, and the like.

The database management software is preferably a Standard Query Language (SQL) database used, for instance, to keep track of the amount of game time remaining on each magnetic card. This software may also be used for location specific tracking.

Communication between the server, games and cashier work station is accomplished through common gateway interface (CGI) scripts, which are controlled through TCI/IP protocol

across a network. The cashier application receives input from a magnetic stripe reader, and assists in the authentication process by communicating with the server to verify the amount of available remaining game play time on a card.

In a preferred embodiment, the cashier application also serves as an interface between each game station and the server by providing remote activation/deactivation, resetting features, and fault tolerance with respect to the database. For instance, during game play, user status and time information is fed to the cashier application software at regular, fractionalized intervals. Detailed error checking and handling information is also provided to the cashier application software.

Generally, the game station application software analyzes the configuration of each game station operating system, and is capable of configuring speed and audio parameters. The game station application software is also capable of disabling all direct user input and control. Preferably, individual game profiles in the game station application software, control specific calls and techniques.

In accordance with one embodiment of the present invention, a network enabled gaming entertainment system is disclosed. The system includes: (1) networking means for providing network communications to support at least one of interactive Intranet and Internet gaming; (2) game station means for interfacing a user into the entertainment system; and (3) server means for processing said network communications in providing account information, gaming profiles and/or gaming.

The gaming entertainment system also includes a bar code reading device for authenticating and/or authorizing a media, such as computer readable medium, for authentication and authorization purposes.

In another embodiment of the present invention, a gaming entertainment software for use in a network enabled gaming entertainment system is disclosed. The software communicates between the various components and systems of the network enabled gaming entertainment system. It includes at least one each of: (1) a database management software; (2) a cashier application software; (3) a game

station application software; and (4) an operating system.

In another embodiment of the present invention, a method for using the network enabled gaming entertainment system is disclosed. The method includes the following sequential, non-sequential and/or sequence independent steps of: (1) reading data from a

media: (2) detecting an authentication identifier in the data; (3) authenticating the data via interrogation of coded pre-strings and post-strings surrounding the unique identifier; and (4) outputting authentication status information regarding the media.

There has thus been outlined, rather broadly, the important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be used as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

Further, the purpose of the foregoing abstract is to enable the U. S. Patent and Trademark Office and the public generally, and especially scientists, engineers and practitioners in the art, who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection, the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

The above objects of the invention, together with other apparent objects of the invention, along with the various features of novelty that characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter, which illustrates preferred embodiments of the invention.

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENTS

Figure 1 shows a front, angled view of one embodiment of the network enabled gaming kiosk of the present invention.

Figure 2 shows a side view of the network enabled gaming kiosk of the present invention per Figure 1.

Figure 3 illustrates an overall or conceptual view of the entities and relationships included in a preferred embodiment of the network enabled gaming kiosk of the present invention.

Figure 4 is a flow chart of the decision logic describing the authentication and operational process of a preferred embodiment of the present invention.

NOTATIONS AND NOMENCLATURES

The detailed description that follows may be presented in terms of program procedures executed on a computer or network of computers. These procedural descriptions and representations are the means used by those skilled in the art to most effectively convey the substance of their work to others skilled in the art.

A procedure is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. These steps are those requiring physical manipulations of physical quantities. Usually, though no necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared and otherwise manipulated. It proves convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like. It should be noted, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities.

Further, the manipulations performed are often referred to in terms, such as adding or comparing, which are commonly associated with mental operations performed by a human operator. No such capability of a human operator is necessary, or desirable in most cases, in any of the operations described herein which form part of the present invention; the operations are machine operations. Useful machines for performing the operation of the present invention include general purpose digital computers or similar devices.

The present invention also relates to apparatus for performing these operations. This apparatus may be specially constructed for the required purpose or it may comprise a general purpose computer as selectively activated or reconfigured by a computer program stored in a

computer. The procedures presented herein are not inherently related to a particular computer or other apparatus. Various general purpose machines may be used with programs written in accordance with the teachings herein, or it may prove more convenient to construct more specialized apparatus to perform the required method steps. The required structure for a variety of these machines will appear from the description given.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following description is presented in the context of a particular application and its requirements. Various modifications to the preferred embodiment will be readily apparent to those skilled in the art, and the general principles defined herein may be applied to other embodiments and applications without departing from the spirit and scope of the invention. Thus, the present invention is not intended to be limited to the embodiment disclosed and shown, but is to be accorded the widest scope consistent with the principles and features disclosed herein.

Figure 1 shows a front, angled view of one embodiment of the network enabled gaming kiosk of the present invention. This kiosk enclosure 10 is designed to be opened using Microsoft's Windows software. The enclosure provides a high technology look without the customary monolithic feel. To further enhance the open look of the kiosk 10, all enclosures have been removed from the power supply and monitor 20.

The physical enclosure itself preferably has the dimensions of 6 x 3 x 3 feet, with full-length windows 30 on each side. The upper bay area 40 preferably houses the necessary computer programs and equipment. The mid bay area 50 is dedicated to the lighting controller/source. And the lower bay area 60 generally houses the sub-woofer, A/C wiring and uninterruptible power source equipment.

In a preferable embodiment, kiosk 10 is manufactured from a high grade particle board, and all corners are machined and rounded. Referring to Figure 2, the controls 70 are mounted on two shelves 80, 90 in the front of the enclosure. The lower shelf 90 is preferably made of the same material as the enclosure. The top shelf 80 is preferably made of clear plastic. Two handles 95 provide support for the upper shelf 80, and act as a light for the lower shelf 90.

Figure 3 describes an overall or conceptual view of the entities and relationships included in a preferred embodiment of the present invention. For completeness, it is to be understood that the instant invention is equally applicable to any standard network of computers, of which the Internet is an example. Such network of computers, for example,

include a standard communications protocol, such as Transmission Control Protocol/Internet Protocol (TCP/IP), Open Systems Interconnection protocol (OSI), User Datagram Protocol (UDP), Wireless Application Protocol (WAP), and/or Bluetooth wireless communications protocol, or any other network-type protocol, local and/or global.

In this preferred embodiment, the network enabled gaming entertainment system is generally comprised of four sub-systems, which take into account performance, reliability and price.

The first sub-system is a server 100, such as a LINUX server, which houses the gaming software programs 102 as well as the data. Alternatively and optionally, the gaming software programs and data may be stored or reside outside the server. This server is run under Redhat 6.0 with game connectivity provided through a SAMBA program. Data management remote access 106 and other data management software protocols are linked to server 100. User authentication is provided through TCP/IP calls via a user authentication database 104.

The second sub-system is the Cashier Workstation 110, which provides an interface to the authentication database 104. Cashier workstation 110 also monitors each kiosk 112.

The third sub-system comprises the actual kiosks 112, which provides user interface to the games for game play.

Finally, the last sub-system is the network system. The network system generally consists of cabling, hubs, routers, network interface cards, switches and the like. Alternatively and optionally, the cashier workstation is collapsible into the network subsystem.

All cabling may consist of plenum category 5 cable, except possibly the fiber-optic segments. All cable terminators, connectors, and patch panels may also be category 5 quality. Hub 120 and the router (i.e., DSL router/interface) 118 are generally 100BaseT. This will allow for 100 megabit per second operation, which is ten times the speed of most conventional networks.

Also, the server connection to the switch 116 may generally embody a 200-megabit per second NUWAY connection. This will increase bandwidth for in-house Intranet gaming. Each network interface card 114 can be 100baseT and full duplex-capable for possible switched operation. Switches will allow for the segmenting of each game station 112, which will also give full duplex operation through the network and allow fiber-optic segments to be implemented.

The network system provides local, Intranet and Internet connectivity. The network is configured for use with both IPX/SPX protocol and TCP/IP. IPX is generally required by games for network communication when not set up for Internet operation.

Referring to Figure 3 in more detail, in a preferred embodiment, the server 100 consists of an AMD K-6 450 MHz processor. This is mounted on a Epox mother board with at least 128 megabytes of RAM (preferably 256 megabytes). Server 100 also uses the IDE interface and at least a 4.5 Gigabyte hard drive, preferably 9-gigabyte SCSI fast, ultra-wide hard drives and SCSI CD-ROM. Advantageously, the server may be configured to process and/or provide account information, gaming profiles and/or local/global gaming.

In one embodiment, each game station or kiosk 112 is configured with a 400 MHz, 3-D technology CPU, 128 megabytes of main system RAM, one megabyte of L2 cache, and an 8-gigabyte ultra DMA hard drive. The sound system consists of twin 50-watt, two-way main speakers with a 100-watt, 12-inch effects woofer. Alternatively and optionally, there are provisions for AC-3 surround sound.

To drive the sound system, a Sound Blaster Live interface card is installable. This, of course, can be updated, as new technology becomes available. Video capability is provided through a Viper V550 adapter, via a Monster 3DII Mpeg converter. This is the highest state-of-the art, while maintaining the widest compatibility. This too can be updated, as new technology becomes available. A 19-inch multi-sync, super-VGA open frame monitor is compatible with the system to provide video output. Open frame not only provides for cooling and easy maintenance, but also provides a high-tech look.

A preferred embodiment of the user interface for each game station 112 includes a joystick, mouse, and keyboard port connections. Different joysticks are able to be plugged in with ease in order to match the joystick with the type of game being played. Keyboards can be able to be easily changed, as can pointing devices. For example, a standard 101 key black keyboard is mountable on the lower shelf 90. The interchangeability of user interfaces in the present invention allows changeability for other types of game input devices.

It is advantageous to use a magnetic card reader for authentication of users (i.e., players, gamers and the like) in the preferred embodiment of the present invention. As such, a bar code reading device for player verification, for authentication and authorization purposes, is installable. All input devices, with the exception of the magnetic card reader, are generally not hard-mounted, for convenience of the user.

The game station case affords several cooling fans, and provide for a comfortable playing position. Each case preferably employs see-through LEXAN™ panels to increase mass appeal.

In a preferred embodiment, lighting may be supplied from a 150-watt light generator, and distributed through a fiber optic light pipe array. The light generator has an integral dichromatic filter that causes the light color to shift a few times each minute. For example, the mounting plates for the motherboard, magnetic card reader and joystick are preferably made of a plastic material that allows light to be injected that creates a glow around the edge. Edge light fiber optic cables are usable to illuminate the inside of the kiosk and also the mother board mounting plate. Light pipes are also run to the handles 95 on each side of the lower front shelf 90.

In a preferred embodiment, the software applications comprising the software suite for the present invention, serve the primary function of communicating between the various operating system, game technologies and the user. It facilitates interactive Intranet and Internet connectivity. It preferably includes the operating systems, the database management software, the cashier workstation application software, the game station application software, and the like.

In one embodiment, an advantageous operating system to use is Microsoft Windows 98™. The standard TCP/IP stack, for example, is used for network connectivity. The interface software is written in Micromedia Director, and the user database is written under MySQL running under Redhat 6.0 LINUX. The games themselves are stored on a server, such as a LINUX server, running with SAMBA supplying the connectivity to the windows environment. Alternatively and optionally, the games could be stored other than on the server.

More specifically, for example, and referring to Figure 3, the database management software 108 is preferably a Standard Query Language (SQL) database running on the server 100 and is used to keep track of the amount of game time remaining on each magnetic game card. Alternatively and optionally, the software 108 may be used for location specific tracking and hierarchical intervalized bi-directional synchronization with a master server through secured Internet protocols. Communication between the server 100, the games 102 and the cashier workstation 110 is accomplished through common gateway interface (CGI) scripts. CGI scripts are preferably written in Perl 5.0 and controlled through TCI/IP protocol across local and wide area networks.

In a preferred embodiment, the cashier workstation 110 is running Windows NT Workstation and an application written in Micromedia Director 7.02. The cashier application receives input from a keyboard-mounted magnetic stripe reader (Low Coercivity Format) (not shown), and has the following functions.

When a card is "swiped", the information is authenticated via interrogation of coded pre- and post-strings, which surround the 16-digit unique identifier that is encoded magnetically on each card. The unique identifier contains a subcode sequence that can be used to track purchase location of the card. Once the card is authenticated, the cashier application communicates with the server 100 through TCP/IP and initiates an SQL query through CGI, as earlier discussed. Server 100 then returns either the amount of available remaining game play time, or indicates that the card is new (i.e., not in the database).

Once the information is verified, the cashier application allows the addition or subtraction of time in 15-minute intervals, for instance. Preferably, time is stored as a five-digit string, providing two digits for minutes and three digits for hours. Magnetic game cards may be removed from the database, and promotional intervals may be automatically added as needed.

The cashier workstation 110 also receives a cyclic, intervalized data input from each kiosk 112, reporting current status and providing error alerts. This data also contains current time use; this provides fault tolerance with respect to the database 104. Remote activation and/or deactivation, and reset of individual kiosks 112, is accomplished via string data communication between the cashier applications and the individual kiosks 112.

Each gaming kiosk 112 preferably employs the Windows 98™ operating system and an application authored under Micromedia Director 7.02. The kiosk application, using Windows Application Programming Interface (API) calls, for example, analyzes the configuration of each game station operating system, configures speed and audio parameters, and disables all direct user input and control. A promotional text stream is downloadable from a main office server via http: protocol, and stored as a variable string. After the startup sequence, a quick-time movie/video plays repeatedly, using Sorensen codec compression, for instance.

Figure 4 is a flow chart of the decision logic describing the authentication and operational process of a preferred embodiment of the present invention. The process begins with user input, as at step 200 (S200).

Upon keyboard or mouse input, the game station application prompts a user to swipe his or her card to begin play. Swiping activates the above-mentioned authentication and query process (S202), which triggers a series of inquiries/selections.

The first determination is existence of authentication problems (S204). If there is a card authentication problem, the system alerts the user to try again, or to see the cashier for further assistance (S206). If card authentication is completed successfully, the second inquiry is addressed: whether there is available remaining time on a user's card (S208).

If there is no time remaining on the card and more time must be purchased, the system alerts the user of such, (S210). On the other hand, if time is available, the user is presented with another set of options, such as whether to get instructions on operating the kiosk, (S212). If this option is selected, those operating instructions are presented, (S214).

If not, the user is presented with the option to review available games, (S216). If this option is selected, the system provides the various types of gaming choices for game play, (S218). On the other hand, a user may choose to completely skip the selection viewing step, and select a desired game for playing, (S220, S222).

Once a game is selected, an internal clock timer (i.e., one-sixtieth of a second) begins to subtract time from the initial time available, and the kiosk application (via API) starts the game and minimizes itself to reduce any impact on game performance. If the time runs out, the z-order of the game window(s) are increased, and the windows are closed through various API calls.

Individual game profiles in the kiosk application software, control the specific calls and techniques. Alternatively and optionally, the game profiles may reside outside the kiosk application software. For instance, if the user quite a game before all of the available time on the user's game card is expired, the system prompts the user with a choice to choose another game or to end the session. In either of these scenarios, the remaining card time is posted to the system's database. During play, status and time information is fed to the cashier workstation application at regular, fractionalized intervals.

It is important to recognize that error checking and handling is common throughout the system's application suite, with limited information provided to the user and more detailed information provided to the cashier application.

Figure 3 also shows a plurality of workstations 120 and kiosks 112 connected to a global network, such as the Internet 122, via an Internet Service Provider (not shown), in accordance with one embodiment. The present invention also accommodates interactive

Internet and/or Intranet gaming access to other electronic audio/video data files through home, office and other electronic equipment, such as television/stereos (not shown), cable/modem (not shown), and personal computers 124. Games and other data may emanate from, or be transmitted to, any one of these stations or devices, including mobile telephone 126 and wireless devices 128.

Additionally, through the Internet 122, one or a plurality of networks 130 can be linked, including direct link-up to Internet gaming service providers. Internet connectivity allows a hookup link for users to play against each other with no geographic boundaries.

For example, users can play a wide variety of games from home, office or a social establishment, against other users similarly (or not similarly) situated. Users can use the Internet as a hookup link for tournaments among multiple players in the same or multiple locations. Through an Internet gaming service provider, for instance, a user (or gamer) can play at the gaming entertainment system of the present invention, and later resume play at home, or at any user desired connectivity point. In another embodiment, users are able to relax at their favorite social establishment, connect at a 'Net GameLink™ kiosk to the Internet, and both enjoy interactive Internet gaming and cruise the Internet.

The above embodiments are only to be construed as examples of the various different types of computer systems that may be utilized in connection with the computer assisted and/or computer implemented process of the present invention.

The many features and advantages of the invention are apparent from the detailed specification. Thus, it is intended by the appended claims to cover all such features and advantages of the invention that fall within the true spirit and scope of the invention.

Further, since numerous modifications and variations will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described. Accordingly, all suitable modifications and equivalents may be resorted to, as falling within the scope of the invention.

CLAIMS

What is claimed is:

1. A network enabled gaming entertainment system comprising:

(a) a network system configured to provide communications signals with one or more game stations and one or more servers;

(b) one or more game stations configured for interactive Internet gaming, in communication with said network system; and

(c) one or more servers in communication with said network system, said one or more servers each configured for processing and providing one or more of account information, gaming profiles or gaming.

2. The gaming entertainment system according to claim 1, further including video and sound systems.

3. The gaming entertainment system according to claim 1, wherein said game station includes at least one interchangeable user interface that allows flexibility for other game input devices.

4. The gaming entertainment system according to claim 1, further including a bar code reading device usable for authentication and authorization purposes.

5. The gaming entertainment system according to claim 1, further configured to accommodate a plurality of games.

6. The gaming entertainment system according to claim 1, wherein said gaming entertainment system is subscriber enabled.

7. The gaming entertainment system according to claim 1, further configured for connectivity to one or more Internet gaming service providers.

8. The gaming entertainment system according to claim 1, further configured for network connectivity of multiple users each at the same or at multiple locations.

9. The gaming entertainment system according to claim 3, wherein said interchangeable user interface includes one or more television, stereo, cable, modem, personal computer, mobile telephone and wireless device.

10. A network enabled gaming kiosk comprising:

(a) a network system configured to provide communications signals;

(b) a server, which communicates with said network system, configured to process one or more of account information, gaming profiles and gaming; and

(c) a game station configured for interactive Internet gaming.

11. The gaming entertainment kiosk according to claim 10, further including video and sound systems.

12. The gaming entertainment kiosk according to claim 10, wherein said game station includes at least one interchangeable user interface that allows flexibility for other game input devices.

13. The gaming entertainment kiosk according to claim 10, further including a bar code reading device usable for authentication and authorization purposes.

14. The gaming entertainment kiosk according to claim 10, further configured to accommodate a plurality of games.

15. The gaming entertainment kiosk according to claim 10, wherein said gaming entertainment kiosk is subscriber enabled.

16. The gaming entertainment kiosk according to claim 10, further configured for connectivity to one or more Internet gaming service providers.

17. The gaming entertainment kiosk according to claim 10, further configured for network connectivity of multiple users each at the same or at multiple locations.

18. The gaming entertainment kiosk according to claim 12, wherein said interchangeable user interface includes one or more television, stereo, cable, modem, personal computer, mobile telephone and wireless device.

19. A gaming entertainment system comprising:

(a) networking means for providing communication signals;

(b) game station means for providing interactive Internet gaming; and

(c) server means for processing said communication signals in providing account information, gaming profiles or gaming.

20. The system of claim 19, further including bar code reading means for at least one of authenticating and authorizing access.

21. The system of claim 19, further including interchangeable user interface means for interfacing a user with said entertainment system in a way that allows flexibility for other game input devices.

22. The system of claim 19, further including video and sound system means for enhanced game play.

23. The system of claim 19, further configured to accommodate a plurality of games.

24. The system of claim 19, further including subscriber enabling means for at least one of monitoring and tracking subscriber use.

25. The system of claim 19, further configured for connectivity to one or more Internet gaming service providers.

26. The system of claim 19, further configured for network connectivity of multiple users each at the same or at multiple locations.

27. The system of claim 19, wherein said user interface means includes one or more television, stereo, cable, modem, personal computer, mobile telephone and wireless device.

28. A gaming entertainment software suite, for use in a network enabled gaming entertainment system, comprises:

(a) a database management software configured for one or more of location specific and data information tracking, and for synchronizing command signals;

(b) a cashier software configured for interfacing with a computer medium reading device for user authentication;

(c) a game station software configured for disabling all user input and control at each game station; and

(d) an operating system for analyzing the configuration of each game station operating system.

29. The gaming entertainment software suite according to claim 28, wherein the cashier software is further configured to interface between each game station and a server by providing remote activation/deactivation.

30. The gaming entertainment software suite according to claim above 28, wherein the cashier software is further configured for resetting features.

31. The gaming entertainment software suite according to claim above 28, wherein the cashier software is further configured to provide fault tolerance with respect to the database.

32. The gaming entertainment software suite according to claim 28, wherein the game station software is capable of configuring speed and audio parameters.

33. The gaming entertainment software suite according to claim 28, wherein the game station software stores one or more individual game profiles.

34. A method for using a gaming entertainment system, comprising the steps of:

(1) reading data from a media;

(2) detecting an authentication identifier in the data;

(3) authenticating the data via interrogation of coded pre-strings and post-strings surrounding the unique identifier; and

(4) outputting authentication status information regarding the media.

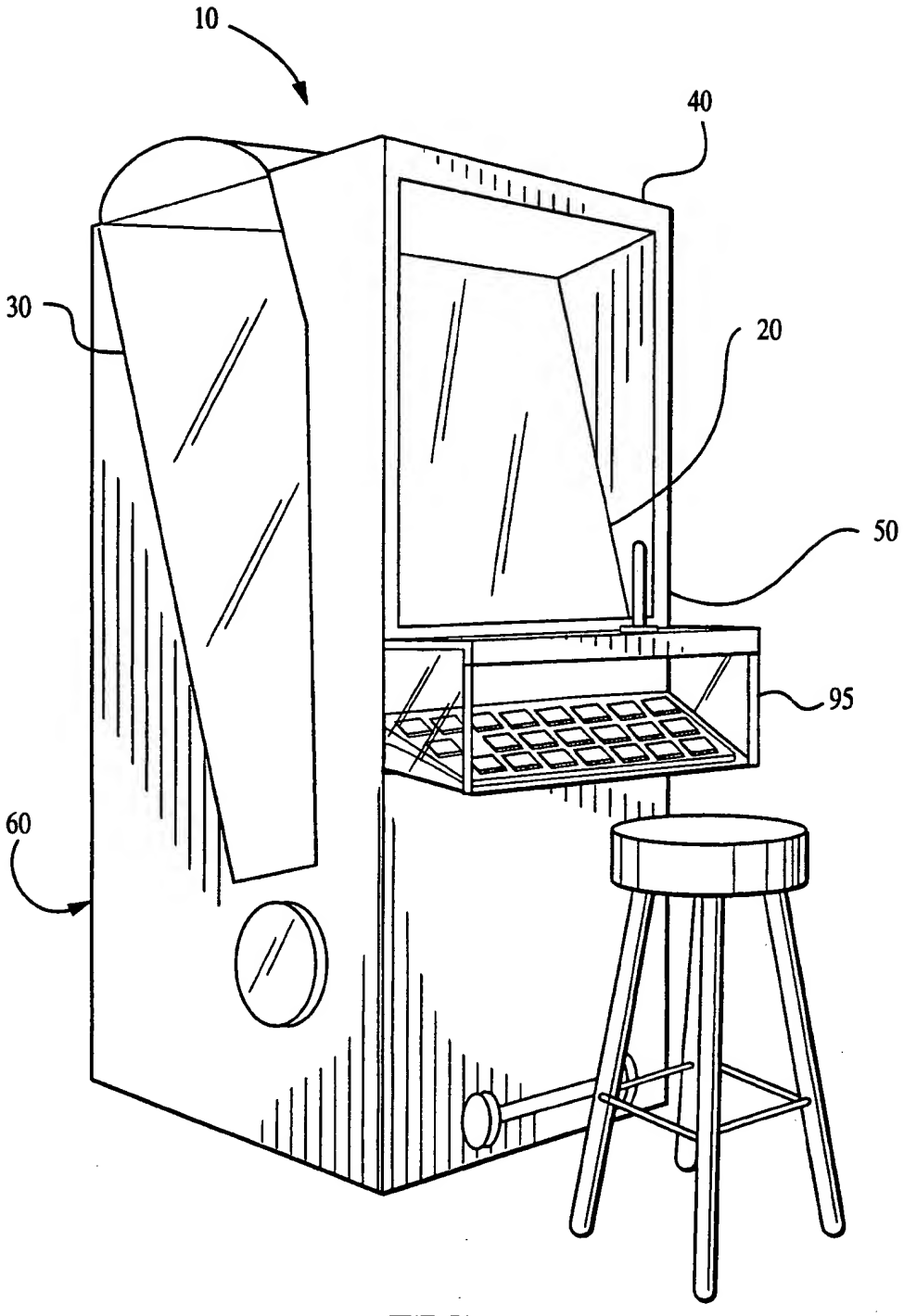

FIG. 1

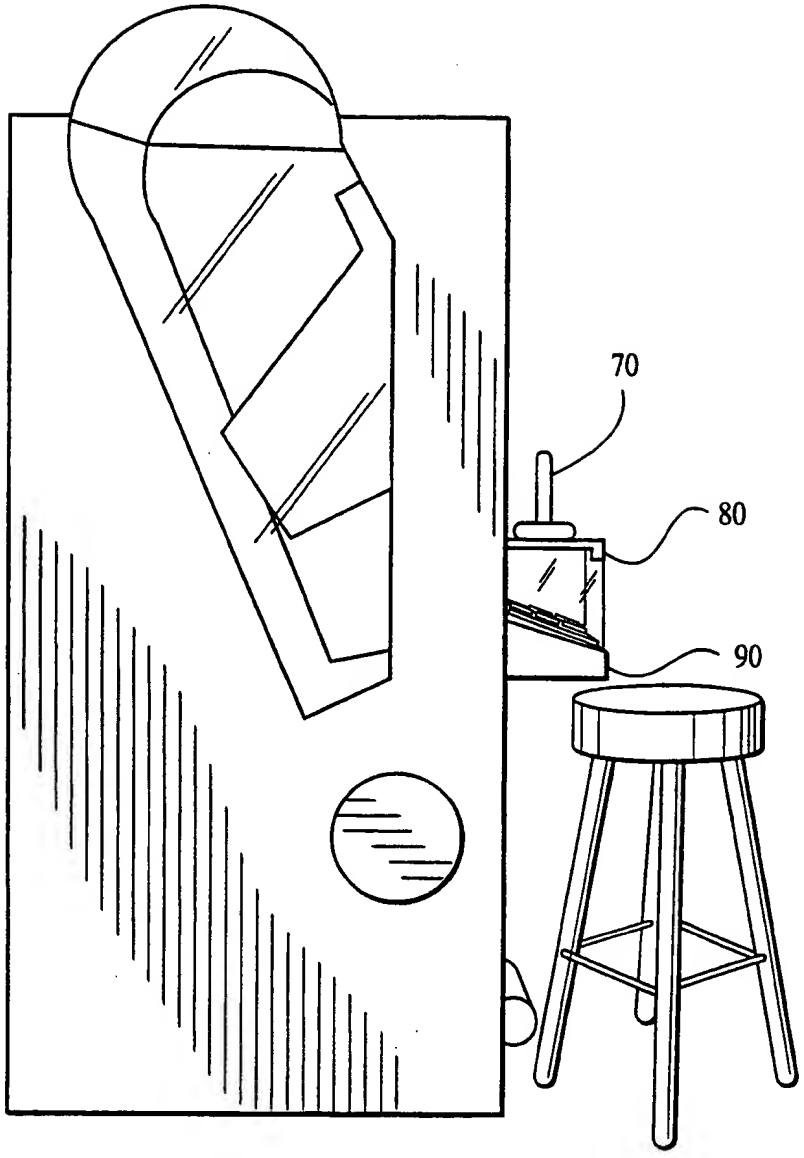

FIG. 2

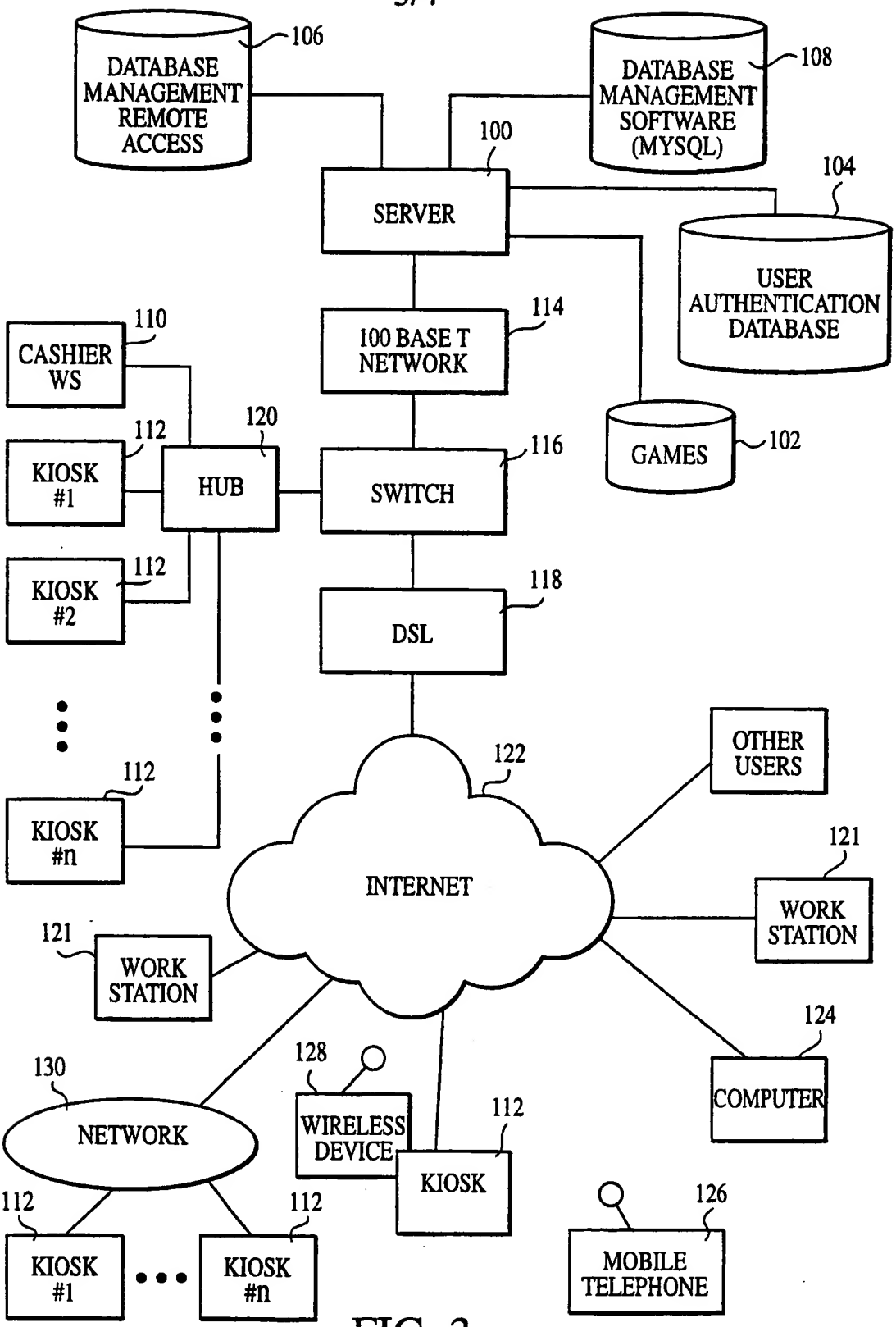
DATABASE MANAGEMENT REMOTE ACCESS
106
DATABASE MANAGEMENT SOFTWARE (MYSQL)
108
100
SERVER
104
USER AUTHENTICATION DATABASE
114
100 BASE T NETWORK
110
CASHIER WS
112
KIOSK #1
120
HUB
116
SWITCH
GAMES
102
112
KIOSK #2
118
DSL
112
KIOSK #n
122
INTERNET
OTHER USERS
121
WORK STATION
121
WORK STATION
124
COMPUTER
130
NETWORK
128
WIRELESS DEVICE
112
KIOSK
126
MOBILE TELEPHONE
112
KIOSK #1
112
KIOSK #n

FIG. 3

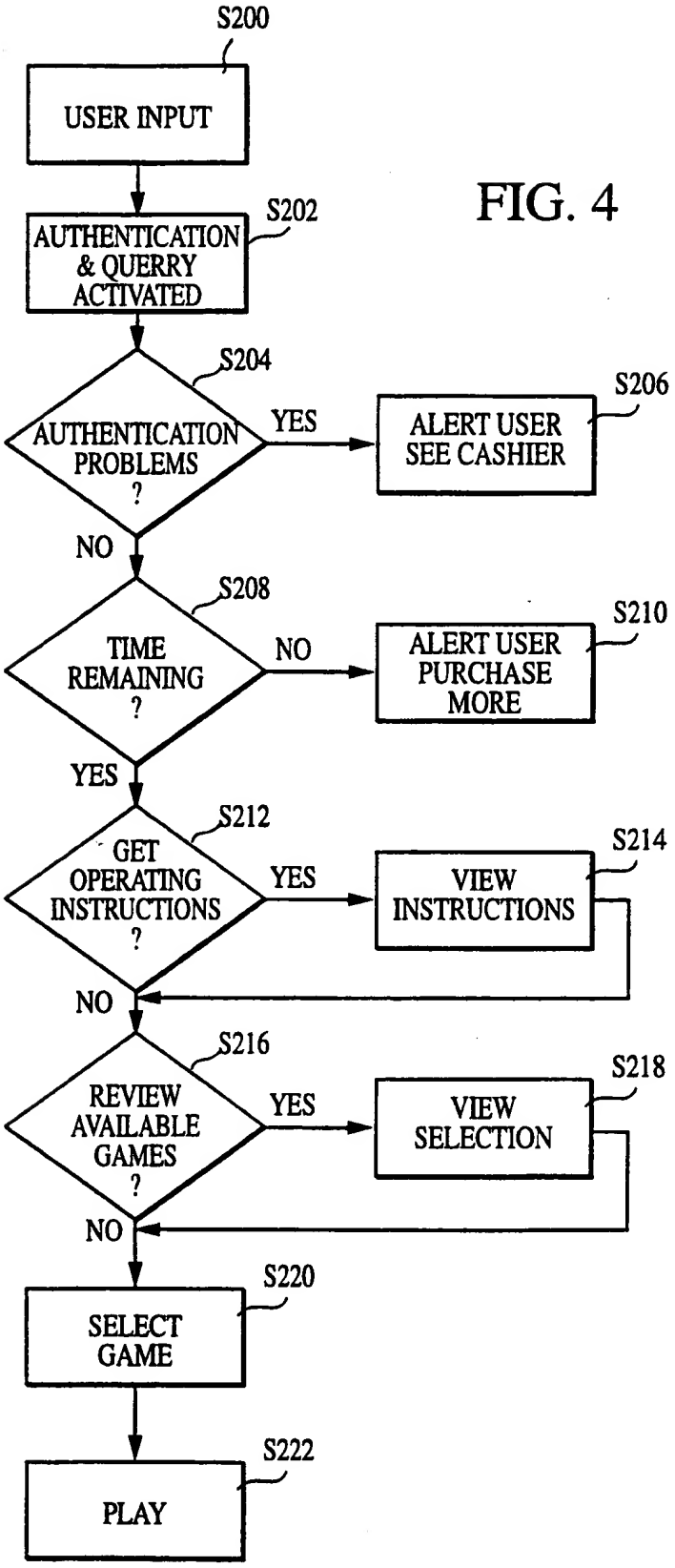
S200
USER INPUT
S202
AUTHENTICATION & QUERRY ACTIVATED
S204
AUTHENTICATION PROBLEMS ?
YES
S206
ALERT USER SEE CASHIER
NO
S208
TIME REMAINING ?
NO
S210
ALERT USER PURCHASE MORE
YES
S212
GET OPERATING INSTRUCTIONS ?
YES
S214
VIEW INSTRUCTIONS
NO
S216
REVIEW AVAILABLE GAMES ?
YES
S218
VIEW SELECTION
NO
S220
SELECT GAME
S222
PLAY

FIG. 4